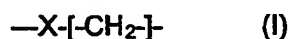


CLAIMS.

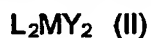
1. A method for preparing a dissolved catalyst component comprising the steps
 5 of:

a) providing a halogenated precursor component of formula (I)



b) reacting the halogenated precursor with an ionic liquid precursor in a
 10 solvent to prepare an ionic liquid;

c) mixing in a solvent one equivalent of the ionic liquid prepared in step b)
 with a metallic complex of formula (II)



wherein L is a coordinating ligand for the metallic site, said coordination
 15 being achieved by phosphorus, nitrogen or oxygen;

d) evaporating the solvent; and

e) retrieving a hybrid single site catalyst component/ionic liquid system.

20 2. The method of claim 1 wherein the ionic liquid precursor is N -alkyl-
 imidazolium or pyridinium.

3. The method of claim 1 or claim 2 wherein between step b) and step c), the
 reaction product of step b) is reacted with an ionic compound C^+A^- , wherein
 25 C^+ is a cation selected from K^+ , Na^+ , NH_4^+ , and A^- is an anion selected from
 PF_6^- , SbF_6^- , BF_4^- , $(\text{CF}_3\text{—SO}_2)_2\text{N}^-$, ClO_4^- , CF_3SO_3^- , NO_3^- or CF_3CO_2^- .

4. The method of any one of the preceding claims wherein the solvent used
 in steps b) and step c) is selected from THF, CH_2Cl_2 or CH_3CN .

5. A hybrid organometallic complex/ionic liquid system obtainable by the method of any one of claims 1 to 4.
6. A hybrid catalyst system comprising the hybrid organometallic complex/ionic liquid system of claim 5 and an activating agent.
7. The hybrid catalyst system of claim 6 wherein the activating agent is methylaluminoxane and wherein Y is a halogen.
8. The hybrid catalyst system of claim 7 wherein the amount of methylaluminoxane is such that the Al/M ratio is of from 100 to 1000.
9. A method for homopolymerising or copolymerising α -olefins that comprises the steps of:
- heterogenising the hybrid catalyst system of any one of claims 6 to 8 by addition of an apolar solvent;
 - injecting into the reactor an apolar solvent and the heterogenised catalyst system of step a)
 - injecting the monomer and optional comonomer into the reactor;
 - maintaining under polymerisation conditions;
 - retrieving the polymer under the form of chips or blocks.
10. The method of claim 9 wherein the apolar solvent is n-heptane.
11. The method of claim 9 or claim 10 wherein the monomer is ethylene or propylene.
12. A polymer having particle sizes of at least 0.5 mm obtainable by the process of any one of claims 9 to 11.